

**Notice of Allowability**

Application No.

09/994,090

Applicant(s)

ODENWALD ET AL.

Examiner

Mohammad O. Farooq

Art Unit

2182

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 5/11/05.
2. ☒ The allowed claim(s) is/are 1-25.
3. ☒ The drawings filed on 16 November 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 9/5/01;2/15/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 5/25/05.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☒ Other IDS-5/11/05.

  
FRITZ FLEMING  
PRIMARY EXAMINER  
GROUP 2100

## **DETAILED ACTION**

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Pater P. Scott on Wednesday, May 25, 2005.

At claim 10 line 1, replace "the second mode" with "referencing a single route";  
and

At claim 14, line 1 and 2, replace " the indication is set for the third mode" with  
"referencing a physical address"

### EXAMINER'S REASONS FOR ALLOWANCE

2. The following is an examiner's statement of reasons for allowance: none of the cited reference(s) either alone or in combination teach or suggest a configurable input/output interface between a host and a target device:

**In independent claim 1**, the at least two modes include at least two of:

a first mode providing a logical identifier utilized to provide the host with access to multiple routes for communicatively coupling the input/output interface to the target utilizing the logical identifier;

a second mode providing a logical identifier utilized to provide the host with access to the target utilizing a single route; and

a third mode providing a logical identifier corresponding to a physical address of the target.

**In independent claim 9**, the at least two modes including at least two of:

referencing multiple data transfer routes between the target and the input/output device utilizing a single logical identifier;

referencing a single route between the target and the input/output device utilizing a logical identifier; and

referencing a physical address of the target utilizing a logical identifier

**In independent claim 16**, the input/output interface include at least two of:

a first mode which configures the controller to provide a logical identifier involving both the second data transfer route and the third data transfer route;

a second mode which provides a first logical identifier involving the second data transfer route and a second logical identifier involving the third data transfer route; and

a third mode providing a logical identifier corresponding to a physical address of the target.

**In independent claim 25**, selecting a mode of at least two modes operable by the input/output interface, wherein

a first mode of the at least two modes configures the input/output interface to provide a host with access to at least two routes for communicatively coupling the input/output interface to the target utilizing the identifying means;

a second mode of the at least two modes wherein the identifying means is utilized to provide the host with access to the target utilizing a single route; and

a third mode wherein identifying means corresponds to a physical address of the target.

**Reference Dally**, teaches parallel alternative paths to local channels between non-local nodes of a network. However, this reference does not teach choosing at least two modes providing logical identifier and corresponding to physical address as the applicant claims to be his invention.

**Reference Hiatt et al.**, teach one or more channels of at least one host and two interfaces for a computer. This reference also does not teach choosing at least two modes providing logical identifier and corresponding to physical address as the applicant claims to be his invention.

**Finally, reference Lentz**, teaches FIFOs with start and end address pointers. Nowhere in the reference is mentioned choosing at least two modes providing logical identifier and corresponding to physical address as the applicant claims to be his invention.

There is an examiner's amendment in this application for claims 10 and 14 authorized by the applicant to provide proper antecedent basis for the stated claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 2182

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad O. Farooq whose telephone number is (571) 272-4144. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on (571) 272-4146. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
FRITZ FLEMING  
PRIMARY EXAMINER  
GROUP 2100

Mohammad O. Farooq  
May 25, 2005